#### COASTAL CONSERVANCY

Staff Recommendation November 10, 2011

#### SOUTH BAY SALT POND RESTORATION: PHASE II PLANNING

Project No. 02-070-03 Project Manager: Brenda Buxton

**RECOMMENDED ACTION:** Authorization to disburse up to \$2,500,000 in Conservancy funds, \$475,000 of which will be reimbursed by the Wildlife Conservation Board, for planning and related work associated with development of Phase II projects of the South Bay Salt Ponds Restoration Project.

**LOCATION:** San Francisco Bay, south of the San Mateo Bridge, in Alameda, San Mateo, and Santa Clara Counties (Exhibit 1)

**PROGRAM CATEGORY:** San Francisco Bay Area Conservancy

## **EXHIBITS**

Exhibit 1: Project Location and Site Map

Exhibit 2: Total Project Costs (Acquisition, Initial Stewardship,

Long-Term Planning, Phase I Implementation,

Shoreline Study, Adaptive Management)

Exhibit 3: Phase I Implementation Costs and Status

Exhibit 4: <u>Project Media</u>
Exhibit 5: <u>Project Letters</u>

#### **RESOLUTION AND FINDINGS:**

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31000 *et seq.* of the Public Resources Code:

"The State Coastal Conservancy hereby authorizes disbursement of up to two million five hundred thousand dollars (\$2,500,000), four hundred seventy five thousand dollars (\$475,000) of which will be reimbursed by the Wildlife Conservation Board, for adaptive management activities and applied scientific studies, engineering and environmental services, design and planning, project management, public outreach, and other work associated with completing planning for Phase II of the South San Francisco Bay Salt Pond Restoration Project. These disbursements include:

1. Up to \$400,000 (four hundred thousand dollars) to the Resources Legacy Fund (RLF) for adaptive management and applied studies. Prior to the disbursement of any Conservancy funds for any study, RLF shall submit for the review and

approval of the Conservancy's Executive Officer a work program for that study, including schedule and budget, and the names of any contractors it intends to use to complete the study.

2. Up to \$25,000 (twenty five thousand dollars) to the San Francisco Estuary Institute (SFEI) for website maintenance and data management at <a href="https://www.southbayrestoration.org">www.southbayrestoration.org</a>. Prior to the disbursement of any Conservancy funds, SFEI shall submit for the review and approval of the Conservancy's Executive Officer a work program, including schedule and budget, and the names of any contractors it intends to use."

Staff further recommends that the Conservancy adopt the following findings:

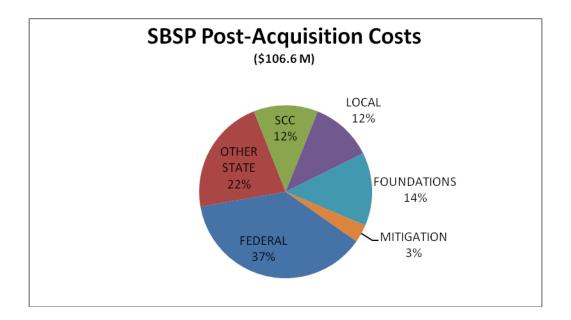
"Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

- 1. The proposed project is consistent with the Conservancy's current Project Selection Criteria and Guidelines.
- 2. The proposed authorization is consistent with the purposes and objectives of Chapter 4.5 of Division 21 of the Public Resources Code, regarding the Conservancy's mandate to address the resource and recreational goals of San Francisco Bay Area.
- 3. The Resources Legacy Fund and San Francisco Estuary Institute are nonprofit organizations existing under Section 501(c)(3) of the U.S. Internal Revenue Code, and whose purposes are consistent with Division 21 of the Public Resources Code."

#### **PROJECT SUMMARY:**

This authorization would allow the Conservancy to embark on planning for the second phase of restoration, public access and flood protection projects for the South Bay Salt Pond Restoration Project, a multi-agency effort to restore 15,100 acres of former Cargill salt ponds in South San Francisco Bay. This authorization would fund work associated with Phase II planning which includes but is not limited to engineering and environmental services, design and planning, project management, including funding for Executive Project Manager and Lead Scientist services, public outreach, website and data management, and as part of the Adaptive Management Program, applied studies that are an integral part of project planning and implementation.

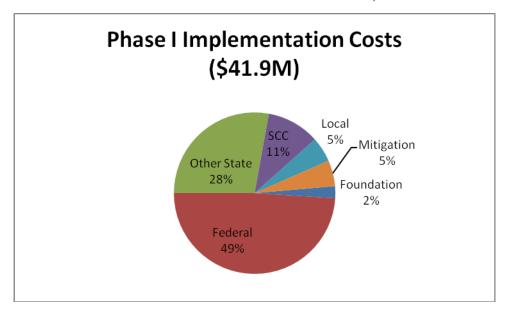
For the design and planning work proposed in this authorization, Conservancy staff expect to be able to complete feasibility-level analysis of proposed Phase II projects. Although this effort is expected to be shorter and less costly than the long-term plan completed in January 2010, Conservancy staff will need to work with project partners to secure additional matching funds to complete all of the analysis and permitting associated with Phase II planning. To date, post-acquisition activities (see chart below) which includes initial stewardship, long-term planning, Phase I implementation, Adaptive Management, and the South San Francisco Bay Shoreline Study has cost \$106.6 million, \$12.8 million of that funded by the Conservancy. Exhibit 2 details the complete project costs including the \$100 million acquisition.



Staff anticipates that completing feasibility analysis will position the Phase II projects better to receive matching funds and that project partners will continue to contribute to the project given the significant investment made by federal, state, and local agencies as well as private foundations. If sufficient matching funds are not forthcoming, then staff will use the feasibility analysis to set project priorities and scale back accordingly.

# South Bay Salt Pond Restoration Project Update

After the 2003 acquisition, the Conservancy began a planning process for a long-term restoration plan in cooperation with the US Fish and Wildlife Service and the California Department of Fish and Game and other project funders. From 2002 to 2006 the Conservancy authorized \$13.45 million for the long-term planning process which included planning for Phase I projects, and the South San Francisco Bay Shoreline Study. With Executive Officer augmentations this amount has totaled \$14.94 million. (This total includes \$6.6 million in funding provided to the Conservancy by the Wildlife Conservation Board.) The five-year planning process was completed with publication of the Record of Decision and the Final Environmental Impact Study/Report (EIS/R) in January 2009. This EIS/R was both a programmatic document for implementation over fifty years in multiple phases and a project-level analysis for the five public access and six wetland construction projects proposed as Phase I. The Conservancy provided an additional \$4 million for implementation of the Phase I projects (including applied studies and project support) in April and November 2008 and authorized expenditure of \$5.8 million in American Recovery and Reinvestment Act funds in June 2009 and \$1 million of US Fish and Wildlife grant funds in September 2009. See chart below for the SCC's proportion of Phase I costs and Exhibit 3 for details of Phase I costs.



Under construction for the last three years, Phase I is now close to completion. The status of Phase I actions are:

Ponds E12/13 managed ponds and public access facilities  Ponds E9/8A/8x tidal	Funding proposal to WCB November 2011. Construction start date estimated 2012.  Completed September 2011.
restoration Moffett Field Bay Trail	Completed September 2010.
Pond SF2 managed pond and public access facilities	Completed September 2010.
Bayfront Park overlook	Completed August 2010.
Pond A6 tidal restoration	Completed December 2010.
Pond A16/17 managed pond and tidal restoration and public access improvements	Project currently under construction; complete 2012.
Pond A8 muted tidal restoration	Completed June 2011.

Only two Phase I projects remain to be completed: Eden Landing Ponds E12/13 and Alviso Ponds A16/17. To construct the managed ponds, public access trail and non-motorized boat launch at Eden Landing Ponds E12/13, Ducks Unlimited, Inc. will be

seeking funding from the Wildlife Conservation Board in November 2011 and expects to start construction in 2012. At Alviso Ponds A16/17, the US Fish and Wildlife Service hopes to construct the managed pond, tidal wetland restoration, new trail alignment and overlook platforms with up to \$4 million of their own funds, funds secured by the Conservancy from the US EPA (\$725,000) and California Department of Water Resources (\$1.25 million), as well as \$625,000 in Conservancy matching funds. Staff anticipates seeking Conservancy authorization in Spring 2012 for the \$625,000 when the revised NEPA/CEQA analysis is complete. To date, the implementation of the project has enjoyed public support as evidenced by on-going attendance at our local geographic working groups, stakeholder forums, and science symposium; significant financial support from a variety of funders (see Exhibit 2); and extensive media coverage of levee breaching events and other South Bay Salt Pond topics (television, radio and print media is posted on <a href="http://southbayrestoration.org/news">http://southbayrestoration.org/news</a>; see Exhibit 4).

# Phase II Planning

In order to continue the current project momentum, Conservancy staff recommends that planning for the next phase of work commence immediately. By continuing to make steady progress towards our long-term project goals, the Conservancy can demonstrate project success, maintain project support from funders and the public, and continue to attract the significant amount of matching funds the project has received to date. Furthermore, it is important that tidal restoration be undertaken now while Bay sediment levels are high enough for marsh plains to accrete so that marshes may better withstand the impacts of sea-level rise in the coming decades. To lay the groundwork for Phase II, the Project Management Team (made up of representatives from the Conservancy, US Fish and Wildlife Service, California Department of Fish and Game, Santa Clara Valley Water District, Alameda County Flood Control District, Resources Legacy Fund, NOAA, US Geological Survey (Lead Scientist), the project's Executive Project Manager, and the Center for Collaborative Policy (public outreach)) held a charrette in 2010 to outline possible next phase projects. These ideas have incorporated public input from working groups, stakeholder forums, and the project's website. The final array of possible Phase II projects includes:

- Alviso Ponds: additional breaches of the Island Ponds (A19, 20, 21) on the Mud Slough side and tidal restoration of Ponds A1 and A2W combined with an earlier restoration project at Charleston Slough.
- Ravenswood Ponds: tidal restoration of R4 and managed pond habitat creation at R5/S5.
- <u>Public Access and Recreation in Alviso and Ravenswood</u>: construction of additional public access features as described in the SBSP Restoration Project's EIS/R, in particular, spine or spur segments of the Bay Trail or facilities for the Water Trail and other public recreation features such as interpretation, trailheads, and overlooks and any other newly emerging opportunities.
- Southern Eden Landing Comprehensive Restoration and Public Access Plan: Tidal restoration of all ponds between Old Alameda Creek and the Alameda Creek Flood Control Channel with trail links with existing and planned Bay

Trail and Water Trail segments. Of particular interest is to create a plan for phasing the restoration through an adaptive management process both to optimize restoration and access while reducing undesired impacts.

• Project-wide Analysis of Beneficially Using Aquatic and Upland Material: Creation of a plan that would allow the project to capitalize on sediment as it becomes available from aquatic or upland sources for habitat creation and flood protection projects. Using dredged material in particular would greatly enhance the fulfillment of long-term project goals as well as the goals of other efforts in San Francisco Bay to facilitate beneficial reuse for dredged material (e.g. the Long Term Management Strategy for the Placement of Dredged Material in the San Francisco Bay Region (LTMS) Program and the US Army Corps of Engineers' development of a long-term Dredged Material Management Plan (DMMP) for San Francisco Bay).

Project possibilities were constrained by several issues. Without the completion of flood protection measures, many areas of the project cannot be opened to tidal action. While the South San Francisco Bay Shoreline Study is analyzing options for flood protection in the Alviso area (update below), the implementation of the Study's recommendations are likely many years in the future. In addition, not enough time has passed for the collection of data to help managers determine the final ratio of managed ponds to tidal wetland restoration, the impacts of wetland restoration on mercury methylation, bird response to re-configured managed ponds, and public use of constructed recreational features. Nevertheless, the proposed Phase II projects would provide significant habitat and recreation improvements and would provide opportunities to make progress on the scientific uncertainties outlined in the Adaptive Management Plan.

# Adaptive Management Implementation

In addition to planning and engineering future projects, the South Bay Salt Pond Restoration Project needs to better understand the significant scientific uncertainties associated with a project of this scale. The project's Adaptive Management Plan describes a program that carefully implements projects in phases and learns from the results so as to improve future design and avoid undesired impacts. In order to implement this Plan, the Conservancy and other funding partners have funded a comprehensive program of applied studies, monitoring, and research. While for some questions, we do not yet have answers, for others, the SBSP's science program has already generated results that are guiding project planning and management. Highlights of the scientific results to date include:

- New restoration sites at the Island Ponds and A6 are accumulating sediment more rapidly than expected and the Island Ponds are showing significant plant colonization in less than five years.
- Monitoring shows an increase in the presence of native fish inside newly restored areas and in adjacent creeks and sloughs.
- Newly created nesting islands in Pond SF2 supported over 150 nesting pairs of shorebirds in their first year.
- Satellite imagery is being used successfully to track large-scale habitat shifts.

• Pond management changes are improving water quality as well as increasing the numbers of dabbling ducks and shorebirds in the project area.

This recommendation would provide up to \$400,000 for critical applied studies, monitoring and directed research that will further implement our Adaptive Management Plan. This money would be provided to the Resources Legacy Fund, a 501(c)(3) nonprofit organization, whose purposes include conservation of the environment and natural resources., The Resources Legacy Fund is a grant-making organization with extensive experience administering grants for environmental restoration and protection purposes, and for critical scientific studies needed to better understand and conserve California's environment. This funding is essential to ensure the project is avoiding undesired impacts, detecting potential problems early, and answering questions about project design. The Resources Legacy Fund successfully administered the studies associated with Phase I in cooperation with the South Bay Salt Pond Restoration Project Management Team and the South Bay Salt Pond Restoration Project Lead Scientist (Phase I implementation was authorized by the Conservancy on November 6, 2008).

## Public Involvement and Outreach and Website & Data Management

The SBSP Project has a robust public involvement program and interest in the project continues to be high. The SBSP Project convenes annual Working Group meetings in each of the three project areas (Eden Landing, Alviso and Ravenswood) and a Stakeholder Forum in addition to special public meetings to address particular topics. As part of this outreach program, the SBSP Project has had several "ribbon-cutting" events that have been well attended and extensively covered by the media.

This recommendation would provide funds to continue the public outreach program. Successful project implementation depends on a sound management structure and active public participation and was described in the EIS/R as an on-going part of the project.

In particular, this authorization would also provide the San Francisco Estuary Institute (SFEI) with \$25,000 to maintain and manage www.southbayrestoration.org and the associated project data and information on this site for an additional year. SFEI is a nonprofit organization whose mission is to foster development of the scientific understanding needed to protect and enhance the San Francisco Estuary through research, monitoring and communication. SFEI's staff of wetlands scientists and information specialists have successfully managed the database and web site. The data and information sharing that the website has allowed has greatly benefited the South Bay Salt Pond Restoration Project as well as other wetlands restoration projects in the Bay. The EIR/S extensively discusses how the Adaptive Management Process works under Chapter 2, Description of Alternatives, and states (p.2-5) "A crucial element of the Adaptive Management Plan is a feedback loop between information generation (science) and decision making (management) while keeping the public informed and involved in the overall process." The website is where the project participants (scientists, landowners, funders, etc.) share and archive data, science reports, project photos, monitoring reports, and permits. The website also serves an important public information and outreach function. Appendix D of the EIR/S, the Adaptive Management Plan, p. vii states "Public involvement [is] an especially important component of successful adaptive management. The public will have multiple avenues to learn about project activities and provide input to the Project

Managers, including through the website as well as Stakeholder Forum and Local Work Group meetings. Collaborative learning among scientists, managers, and the public will allow for public comment and input on the decision-making process and ensure transparency through Project reporting." The website helps fulfill this public function and is an efficient and cost-effect means of communication.

# South San Francisco Bay Shoreline Study Update

The South San Francisco Bay Shoreline Study (the "Shoreline Study") is a feasibility study that is being jointly funded by the Santa Clara Valley Water District (SCVWD), the Conservancy, and the U.S. Army Corps of Engineers under a Feasibility Cost Share Agreement. Although this planning process follows Corps processes, it is expected that the project recommendations will be consistent with the SBSP Project restoration planning and will provide a means for the Corps to cost-share on implementation of future SBSP restoration, flood protection, and public access projects.

Originally the Shoreline Study encompassed all the ponds in Santa Clara County, including areas outside of the ponds not in the SBSP project area. However, during the "without project conditions" phase of the Study, the cost and time required to model, plan, and analyze this large of a project area proved to be much more than anticipated. In order to bring costs under control and finish the Study before the targeted implementation date of 2017, the Corps, SCVWD, and the Conservancy have decided to focus on that portion of the Study area that had some of the highest estimated damages from tidal flooding – the Alviso area between Alviso Slough and Coyote Creek which includes Alviso Ponds 9-18. The Corps is currently working on developing restoration and flood protection alternatives for this area with an estimated completion date of 2013. At this time, the proposed project elements are generally:

- Tidal restoration of Ponds A9 through A15 to be phased in through an adaptive management plan that is integrated into the Adaptive Management Program of the SBSP Project.
- Tidal restoration of Pond A18 with possible creation of large upland areas and brackish marshes using treated wastewater effluent or storm water.
- Flood protection through an engineered levee system that would connect the existing high ground between Alviso Slough and Coyote Creek.
- Public trails on levees and connections to the existing trail network.

The Conservancy's past authorizations for in-kind consultant services and cash totals \$1,450,000. Additional funds for the Shoreline Study are not needed at this time from the Conservancy and the need for additional Conservancy funds is not anticipated through the end of this Feasibility Study.

**Site Description:** The entire South Bay salt pond complex is spread over an area of approximately 26,000 acres. Salt ponds surround nearly the entire San Francisco Bay south of the San Mateo Bridge (Exhibit 1), on lands that were formerly tidal marsh. An estimated 85 percent of the historic tidal marshes in the San Francisco Bay-Delta Estuary have been filled or significantly altered over the past two centuries for urban development, agriculture, and salt production. Although dramatically different from 150 years ago, the South Bay's wetland habitats, including the salt ponds, tidal marshes,

sloughs, mudflats, and open bay, are used by large populations of waterfowl and shorebirds, by harbor seals, and by a number of threatened and endangered species, including the California clapper rail, California black rail, California brown pelican, California least tern, western snowy plover, salt marsh harvest mouse, and steelhead trout.

**Project History:** In March 2003, 15,100 acres of South Bay salt ponds, along with 1,400 acres of crystallizer ponds along the Napa River were acquired with \$72 million from the Wildlife Conservation Board, \$8 million from the FWS, and \$20 million from the Goldman Fund, Hewlett Foundation, Moore Foundation, and Packard Foundation.

FWS and DFG have taken ownership of the properties and the planning and implementation of most of the Phase I projects have been completed. The remaining ponds are actively managed according to the goals set forth in the Initial Stewardship Plan (e.g. open, unvegetated ponds with enough circulation to prevent salt production) until further implementation planning and the appropriate adaptive management studies are completed.

# PROJECT FINANCING

<b>Coastal Conservancy</b>	\$2,025,000.00
Wildlife Conservation Board	\$475,000.00

Total Project Costs \$2,500,000.00

To date, the Conservancy has provided for long-term planning, Phase I construction, adaptive management, and the Shoreline Study \$12.8 million which has been matched by \$85 million from federal, state, local and private sources (these costs do not include the portions of the project the Conservancy did not participate in funding which are acquisition (\$100 million) and Initial Stewardship (\$21.6 million) -- see Exhibit 2 for complete project costs). As Phase II is being launched with this funding authorization, planning will include working with project partners to locate sufficient matching funds to move the planning beyond the feasibility assessment stage, complete design and environmental analysis, and move into implementation. Based on the significant investment from federal, state, and local agencies and private foundations (\$206.6 million in total to date), staff expects that there will continue to be contributions to the project, albeit at a reduced level due to the more difficult financial climate.

#### Conservancy Funding Source

\$475,000 of this authorization will be from the Wildlife Conservation Board (WCB) which granted \$40 million from the "Water Security, Clean Drinking Water, Coastal and Beach Protection Fund of 2002" (Proposition 50) to the Conservancy in 2003 to fund Bay Area wetland habitat restoration projects, including related planning and technical design activities that implement the wetland restoration goals of the San Francisco Bay Joint Venture and the *San Francisco Baylands Ecosystem Habitat Goals Report* (1999). Implementation of the South Bay Salt Pond Restoration Project is one of the key projects that will complete the vision of a restored, healthy bay called for in the *Goals Report*.

The source of the remaining \$2,025,000 for this project is expected to be the Conservancy's fiscal year 2009 appropriation from the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Proposition 84). This funding source may be used for the protection of bays and coastal waters, including projects to prevent contamination and degradation of coastal waters and watersheds, projects to protect and restore the natural habitat values of coastal waters and lands, and projects and expenditures to promote access to and enjoyment of the coastal resources of the state pursuant to the Conservancy's enabling legislation, Division 21 of the Public Resources Code. See Public Resources Code section 75060. The proposed project protects coastal waters and restores natural habitat values by planning for construction of tidal wetlands and shallow water ponds that will provide habitat for numerous species as well as improve water quality. Finally, as discussed below, the project is consistent with Chapter 4.5 of Division 21.

Consistent with Proposition 84 requirements, the proposed project also includes funding for monitoring and reporting necessary to ensure successful implementation of the project objectives. See Public Resources Code section 75005(n).

Another requirement of Proposition 84 is that for projects that restore natural resources, the Conservancy give priority to projects that meet one or more of the criteria specified in Section 75071. The proposed restoration project satisfies the following specified criteria: (a) <u>Landscape/Habitat Linkages</u> – one of the largest wetland restoration projects on the west coast of North America, the project will facilitate wildlife movement, botanical transfer, and sustain large acreage of habitat over time, and (b) <u>Watershed Protection</u> – the project will contribute to long-term protection of and improvement to the water and biological quality of the San Francisco Bay.

#### CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

This project would be undertaken pursuant to Chapter 4.5 of the Conservancy's enabling legislation, Public Resources Code Sections 31160-31165, to address resource goals in the San Francisco Bay Area.

The South Bay salt ponds are within the nine-county Bay Area as required under Section 31162 of the Public Resources Code.

Under Section 31162(a), the Conservancy may undertake projects to improve public access to and around the Bay, without having a significant adverse impact on environmentally sensitive areas and wildlife, such as wetlands, through completion of regional trails, local trails connecting to population centers and public facilities and which are part of a regional trail system, and through the provision of related facilities. The proposed projects will include public access improvements and recreational components.

Under Section 31162(b), the Conservancy may act to protect, restore, and enhance natural habitats and connecting corridors, watersheds, scenic areas, and other open-space resources of regional significance. The restoration of the South Bay salt ponds will restore or enhance nearly 16,000 acres of wetlands, and is a habitat restoration project of regional and national significance.

Under Section 31162(d), the Conservancy may act to promote, assist, and enhance projects that provide open space and natural areas that are accessible to urban populations

for recreational and educational purposes. The South Bay salt ponds will provide an important open space resource for recreational purposes.

Consistent with Section 31163(c), restoration of the South Bay salt ponds meets the following criteria: (1) is supported by adopted regional plans (San Francisco Bay Plan, San Francisco Baylands Ecosystem Habitat Goals Report (1999), pp. 97, 126-139, and the Water Quality Control Plan (1993) p. 5-3 for the San Francisco Bay Basin ), (2) is multijurisdictional (spanning three counties) and serves a regional constituency (the restoration project is of national significance and will provide a regional recreational resource), (3) can be implemented in a timely way (restoration planning is expected to take five years, at which point restoration will begin and will be implemented in a phased manner), and (4) provides opportunities for benefits that could be lost if the project is not quickly implemented such as the ability to use natural processes to bring pond bottoms up to marsh plain elevations.

The project is also consistent with Sections 31163(a) and (b), directing the Conservancy to participate in and support interagency actions and public/private partnerships in the San Francisco Bay Area to implement long-term resources and outdoor recreational goals.

# CONSISTENCY WITH CONSERVANCY'S 2007 STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):

Consistent with **Goal 10, Objective B** of the Conservancy's 2007 Strategic Plan, the proposed project will develop plans for restoration or enhancement of approximately 3000 acres of wetlands. In addition, this authorization is consistent with **Goal 11, Objective A** to develop plans that provide recreation facilities and **Goal 11, Objective D** to develop plans for creation of 3.5 miles of the San Francisco Bay Trail.

# CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA & GUIDELINES:

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines, last updated on June 4, 2009, in the following respects:

# **Required Criteria**

- 1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
- 2. Consistency with purposes of the funding source: See the "Project Financing" section above.
- 3. **Support of the public:** This project is supported by Senator Dianne Feinstein, the Richard and Rhoda Goldman Fund, the William and Flora Hewlett Foundation, the Gordon E. and Betty I. Moore Foundation, the David and Lucile Packard Foundation, Resources Legacy Fund, the California Resources Agency, California Department of Fish and Game, U.S. Fish and Wildlife Service, Santa Clara Valley Water District, Alameda County Flood Control District, the San Francisco Bay Joint Venture, Save The Bay, The Bay Institute, National Audubon Society,

Citizen's Committee to Complete the Refuge, Cargill, and many other agencies, organizations, and individuals.

- 4. **Location:** The South Bay salt ponds are in the nine-county San Francisco Bay Area consistent with Section 31162 of the Public Resources Code.
- 5. **Need:** Approximately 85 percent of the tidal marsh in San Francisco Bay has been lost since the Gold Rush, leading to dramatic losses of fish and wildlife, decreased water quality and increased turbidity in the Bay, and changes to physical processes as the size of the Estuary shrank, increasing the need for dredging and the local hazards of flooding. The need for restoration of tidal marsh in San Francisco Bay in order to aid in the recovery of at-risk species, and improve water quality and the physical health of the Bay, is well recognized among scientists and resource managers. Without the addition of Conservancy funding, these important objectives, which underlie the South Bay Salt Pond implementation projects and the Shoreline Study, would not be met.
- 6. **Greater-than-local interest:** Restoration of this area is of national significance and will result in the largest tidal wetland restoration project on the west coast of the United States. When combined with other restoration projects underway in San Francisco Bay, including Napa-Sonoma Marsh, Hamilton/Bel Marin Keys, Bair Island, Eden Landing, and Sonoma Baylands, the project is on scale with other national restoration efforts, such as the Everglades and Chesapeake Bay. Restoration of the South Bay salt ponds to a mix of tidal marsh and managed ponds will provide benefits to a large number of species, including migratory waterfowl and shorebirds, and aid in the recovery of several threatened or endangered species, including the California clapper rail and salt marsh harvest mouse.
- 7. **Sea level rise vulnerability:** Due to their location, all tidal wetland restoration projects can be vulnerable to sea-level rise impacts. However, once the marsh plain of a restored wetland is colonized by vegetation, marshes become efficient sediment traps. Hydrological modeling done as part of the South Bay Salt Ponds Restoration Project's geomorphological analysis indicates that the south Bay's wetlands are likely to keep up with an accelerated pace of sea-level rise. If sealevel rise rates are higher than modeled, it could take longer for marsh vegetation to develop or, in more extreme scenarios, may mean that the restoration sites do not evolve past the intertidal mudflat or shallow open water stage. However, much of the SBSP project area is likely to withstand the impacts from sea-level rise for several reasons. The Ravenswood and Alviso Ponds are located in the sediment-rich South Bay and Phase I projects have shown much more rapid than predicted sedimentation and colonization by vegetation. In the Eden Landing area, most of the ponds have only subsided 1 to 3 feet which reduces the amount of time necessary for these ponds to rise to marsh plain elevation. Once vegetated, the site will be more resilient to impacts of sea-level rise.

#### **Additional Criteria**

8. **Urgency:** In order to maintain project momentum, planning for subsequent phases needs to start immediately since it will take approximately two to three years of analysis, environmental review, and permitting before construction can begin on Phase II projects. The SBSP project needs to maintain the steady

progress it has made on project implementation to ensure project success over the long run.

- 9. **Resolution of more than one issue:** The restoration of the South Bay salt ponds will provide for habitat restoration for fish and wildlife, improved water quality and flood control, and enhanced recreational opportunities.
- 10. **Leverage:** See the "Project Financing" section above.
- 11. **Innovation:** Restoration of the South Bay salt ponds is a national model for how to coordinate a scientifically sound, publicly-supported, multi-objective, multi-agency project, on scale with the Everglades and Chesapeake Bay.
- 12. **Realization of prior Conservancy goals:** This project builds on the Conservancy's participation in the development of the *San Francisco Baylands Ecosystem Habitat Goals Report*, which has goals, objectives, and recommendations for restoration in San Francisco Bay, and the Conservancy's participation in wetland acquisition and restoration projects in San Francisco Bay, including Napa Marsh, Bair Island, and Hamilton/Bel Marin Keys. This authorization builds upon previous authorizations by the Conservancy and maintains the Conservancy's investment of \$12.8 million to date.
- 13. **Cooperation:** The Conservancy is facilitating the long-term restoration planning, working closely with DFG and FWS. The Conservancy, WCB, and private foundations are cooperatively funding the restoration planning. In addition, over 50 entities have been identified as stakeholders in this restoration project, including local, state, and federal agencies, nongovernmental organizations, special districts, utilities, and the general public.

#### CONSISTENCY WITH SAN FRANCISCO BAY PLAN:

The South Bay salt ponds are within the permit jurisdiction of the San Francisco Bay Conservation and Development Commission ("BCDC").

The project is consistent with the following policies of BCDC's San Francisco Bay Plan (Reprinted 2008):

# Part III: The Bay as a Resource

#### Water Quality (p.17)

• To the greatest extent feasible, the Bay marshes, mudflats, and water surface area and volume should be maintained and, whenever possible, increased.

# Water Surface Area and Volume (p. 20)

• Water circulation in the Bay should be maintained, and improved as much as possible.

# Marshes and Mudflats (p. 21)

• To offset possible additional losses of marshes due to necessary filling and to augment the present marshes: (a) former marshes should be restored when possible through removal of existing dikes; (b) in areas selected on the basis of competent

ecological study, some new marshes should be created through carefully placed lifts of dredged spoils; and (c) the quality of existing marshes should be improved by appropriate measures whenever possible.

## Part IV: Development of the Bay and Shoreline

# Public Access (pp. 50-60)

- In addition to the public access to the Bay provided by waterfront parks, beaches, marinas, and fishing piers, maximum feasible access to and along the waterfront and on any permitted fills should be provided in and through every new development in the Bay or on the shoreline, whether it be for housing, industry, port, airport, public facility, wildlife area, or other use, except in cases where public access would be clearly inconsistent with the project because of public safety considerations or significant use conflicts, including unavoidable, significant adverse effects on Bay natural resources. In these cases, in lieu access at another location preferably near the project should be provided.
- Public access to some natural areas should be provided to permit study and enjoyment
  of these areas. However, some wildlife is sensitive to human intrusion. For this
  reason, projects in such areas should be carefully evaluated in consultation with
  appropriate agencies to determine the appropriate location and type of access to be
  provided.

# Salt Ponds and Other Managed Wetlands Around the Bay (pp. 65-68)

• As long as is economically feasible, the salt ponds should be maintained in salt production and the wetlands should be maintained in their present use. Property tax policy should assure that rising property taxes do not force conversion of the ponds and other wetlands to urban development. In addition, the integrity of the salt production system should be respected (i.e., public agencies should not take for other projects any pond or portion of a pond that is a vital part of the production system).

If, despite these provisions, the owner of the salt ponds or the owner of any managed wetland desires to withdraw any of the ponds or marshes from their present uses, the public should make every effort to buy these lands, breach the existing dikes, and reopen these areas to the Bay. This type of purchase should have a high priority for any public funds available, because opening ponds and managed wetlands to the Bay represents man's last substantial opportunity to enlarge the Bay rather than shrink it. (In some cases, if salt ponds are opened to the Bay, new dikes will have to be built on the landward side of the ponds to provide the flood protection now being provided by the salt pond dikes.)

# **COMPLIANCE WITH CEQA:**

As feasibility and planning activity, under 14 California Code of Regulations Section 15262, this project is categorically exempt from CEQA review. Similarly, 14 Cal. Code of Regulations Section 15306 exempts basic data collection, research, and resource-evaluation activities which do not result in a serious or major disturbance to an environmental resource.